

Lower Yakima Valley Safe Drinking Water Act Petition

SUPPLEMENTAL INFORMATION: **Groundwater Studies Demonstrating Increase in Nitrate Contamination in** **Lower Yakima Valley From 1988 to 2019**

- 1988:** WASH. DEP'T OF ECOLOGY, WASHINGTON STATE AGRICULTURAL CHEMICALS PILOT STUDY: FINAL REPORT (Nov. 1990), <https://apps.ecology.wa.gov/publications/documents/9046.pdf>
- 27 wells sampled for nitrate
 - 8 wells showed detectable concentrations
 - 0 wells exceeded MCL of 10 mg/L
- 1990:** WASH. DEP'T OF ECOLOGY, GROUNDWATER QUALITY ASSESSMENT: HORNBY DAIRY LAGOON, SUNNYSIDE, WA (rev. Mar. 1993), <https://apps.ecology.wa.gov/publications/documents/92e23.pdf>
- 5 monitoring wells sampled near Hornby Dairy Lagoon
 - 2 monitoring wells at exceeded MCL
- 1991:** USGS, SURVEY OF GROUNDWATER QUALITY IN THE TOPPENISH CREEK BASIN, YAKAMA INDIAN RESERVATION, WA, 1989-1991 (1998), <https://doi.org/10.3133/wri974194>; SELECTED WATER-QUALITY DATA FOR THE TOPPENISH CREEK BASIN, YAKIMA INDIAN RESERVATION, WA, 1989 (1994), <https://pubs.usgs.gov/of/1993/0486/report.pdf>
- 487 wells sampled
 - 2 wells (0.4%) exceeded MCL
- 2002:** WASH. DEP'T OF ECOLOGY, QUALITY OF GROUNDWATER IN PRIVATE WELLS IN THE LOWER YAKIMA VALLEY, 2001-2002 (Dec. 2002), <https://apps.ecology.wa.gov/publications/documents/0210074.pdf>
- 249 residential drinking water wells sampled
 - 40 wells (16%) exceeded MCL
- 2010:** EPA, RELATION BETWEEN NITRATE IN WATER WELLS & POTENTIAL SOURCES IN THE LOWER YAKIMA VALLEY, WA (rev. Mar. 2013), <https://www.epa.gov/sites/default/files/2017-12/documents/lower-yakima-valley-groundwater-report-2013.pdf>
- 331 residential drinking water wells sampled
 - 67 wells (20%) exceeded MCL

2017: USGS, CONCENTRATIONS OF NITRATE IN DRINKING WATER IN THE LOWER YAKIMA RIVER BASIN, GROUNDWATER MANAGEMENT AREA: 2017 (May 2018), <https://pubs.usgs.gov/ds/1084/ds1084.pdf>

- 156 residential drinking water wells sampled
- **40 wells (26%) exceeded MCL**

2018: QAPP: BENTON COUNTY GROUNDWATER NITRATE MONITORING STUDY (Aug. 2016), <https://fortress.wa.gov/ecy/publications/summarypages/1610028.html>

- [EIM Data](#)
- [EIM Study](#)
- 261 wells sampled
- **60 wells (23%) exceeded MCL**

2019: LOWER YAKIMA VALLEY GWMA AMBIENT GROUNDWATER MONITORING WELL INSTALLATION REPORT (2019), <https://www.yakimacounty.us/DocumentCenter/View/21362/Yakima-GWMA-Well-Installation-Report?bidId=>

- 29 monitoring wells sampled (excluding wells in dairy cluster area)
- **13 wells (45%) exceed MCL**